Amendments to the Claims

- 1. (Currently Amended) An aqueous plant protection formulation in the form of a suspension comprising at least one polymer which can be prepared by radical copolymerization of
- A) acrylamidopropylmethylenesulfonic acid (AMPS) and/or its salts;
- B) one or more macromonomers according to formula (1)

$$R^{1}-Y-(R^{2}-O)_{x}(R^{4}-O)_{z}-R^{3}$$
 (1)

in which wherein

R¹ is a vinyl, allyl, acryloyl, methacryloyl, senecioyl or crotonyl residue;

 R^2 and R^4 are, independently of one another, (C_2-C_4) -alkylene;

- x and z are, independently of one another, a whole number between 0 and 500, with x+z greater than or equal to 1;
- Y is O, S, PH or NH, preferably O; and
- R^3 is hydrogen or a saturated or unsaturated, linear or branched, aliphatic, cycloaliphatic or aromatic (C₁-C₁₀₀)-hydrocarbon residue, preferably (C₁-C₃₀)-hydrocarbon residue,

and

- C) optionally one or more other at least mono- or polyolefinically unsaturated oxygen-, nitrogen-, sulfur-, phosphorus-, chlorine- and/or fluorine-comprising containing comonomers.
- 2. (Original) A plant protection formulation as claimed in claim 1, wherein the comonomer A) is the sodium salt and/or ammonium salt of acrylamidopropylmethylenesulfonic acid (AMPS).

- 3. (Currently Amended) A plant protection formulation as claimed in claim 1-or 2, wherein
- R¹ is an acryloyl or methacryloyl residue;

R² and R⁴ are, independently of one another, C₂-alkylene or C₃-alkylene;

- x and z are, independently of one another, an integer between 0 and 50, with x+z greater than or equal to 1;
- is an aliphatic (C₄-C₂₂)-alkyl or -alkenyl residue, preferably (C₁₀-C₂₂)-alkyl or -alkenyl residue; a (C₁-C₂₂)-alkylphenyl residue, preferably sec-butyl- or n-butylphenyl residue; a poly((C₁-C₂₂)-alkyl)phenyl residue, preferably tris(sec-butyl)phenyl residue or tris(n-butyl)phenyl residue; or a polystyrylphenyl residue, preferably tristyrylphenyl residue.
- 4. (Original) A plant protection formulation as claimed in claim 3, wherein the R³ residue is a 2,4,6-tris(sec-butyl)phenyl residue or 2,4,6-tris(1-phenylethyl)phenyl residue.
- 5. (Currently Amended) A plant protection formulation as claimed in claim 1, wherein the polymers can be at least one polymer is prepared by radical copolymerization of
- A) acrylamidopropylmethylenesulfonic acid (AMPS), the sodium salt of acrylamidopropylmethylenesulfonic acid (AMPS) and/or the ammonium salt of acrylamidopropylmethylenesulfonic acid, preferably the ammonium salt of acrylamidopropylmethylenesulfonic acid (AMPS);
- B) one or more macromonomers chosen-selected from the group consisting of the esters formed from methacrylic acid or acrylic acid, preferably methacrylic acid, and compounds of the formula (2)

$$HO-(CH_2-CH_2-O)_x-R^3$$
 (2)

- in which wherein x is a number between 1 and 50, particularly preferably 5 and 30, and R^3 is a (C_{10} - C_{22})-alkyl residue; and
- C) optionally one or more comonomers <u>ehosen-selected</u> from the group consisting of acrylamide, vinylformamide, N-vinylmethylacetamide, sodium methallylsulfonate, hydroxyethyl methacrylate, acrylic acid, methacrylic acid, maleic anhydride, methacrylamide, vinyl acetate, N-vinylpyrrolidone, vinylphosphonic acid, styrene, styrenesulfonic acid (Na salt), t-butyl acrylate and methyl methacrylate.
- 6. (Currently Amended) A plant protection formulation as claimed in at least one of claims 1 to 5claim 1, wherein the one or more macromonomers B) are esters formed from acrylic acid or methacrylic acid and or alkyl ethoxylates chosen-selected from the group consisting of the $(C_{10}-C_{18})$ -fatty alcohol polyglycol ethers with 8 EO units, C_{11} -oxo alcohol polyglycol ethers with 8 EO units, $(C_{12}-C_{14})$ -fatty alcohol polyglycol ethers with 7 EO units, $(C_{12}-C_{14})$ -fatty alcohol polyglycol ethers with 11 EO units, $(C_{16}-C_{18})$ -fatty alcohol polyglycol ethers with 15 EO units, $(C_{16}-C_{18})$ -fatty alcohol polyglycol ethers with 15 EO units, $(C_{16}-C_{18})$ -fatty alcohol polyglycol ethers with 16 EO units, $(C_{16}-C_{18})$ -fatty alcohol polyglycol ethers with 27 EO units, $(C_{16}-C_{18})$ -fatty alcohol polyglycol ethers with 28 EO units, iso $(C_{16}-C_{18})$ -fatty alcohol polyglycol ethers with 29 EO units and/or and C_{22} -fatty alcohol polyglycol ethers with 25 EO units.
- 7. (Currently Amended) A plant protection formulation as claimed in claim 1, wherein the polymers can be at least one polymer is prepared by radical copolymerization of
- A) acrylamidopropylmethylenesulfonic acid (AMPS), the sodium salt of acrylamidopropylmethylenesulfonic acid (AMPS) and/or the ammonium salt of acrylamidopropylmethylenesulfonic acid, preferably the ammonium salt of acrylamidopropylmethylenesulfonic acid (AMPS);

B) one or more macromonomers chosen-selected from the group consisting of the esters formed from methacrylic acid or acrylic acid, preferably methacrylic acid, and compounds of the formula (3)

$$HO-(CH_2-CH_2-O)_x-R^3$$
 (3)

in whichwherein

x is a number between 1 and 50, particularly preferably 5 and 30, and R³ is a poly((C₁-C₂₂)-alkyl)phenyl residue, preferably tris(sec-butyl)phenyl residue or tris(n-butyl)phenyl residue, particularly preferably 2,4,6 tris(sec-butyl)phenyl residue, or a tris(styryl)phenyl residue, preferably 2,4,6 tris(1-phenylethyl)phenyl residue; and

- C) optionally one or more comonomers chosen selected from the group consisting of acrylamide, vinylformamide, N-vinylmethylacetamide, sodium methallylsulfonate, hydroxyethyl methacrylate, acrylic acid, methacrylic acid, maleic anhydride, methacrylamide, vinyl acetate, N-vinylpyrrolidone, vinylphosphonic acid, styrene, styrenesulfonic acid (Na salt), t-butyl acrylate and methyl methacrylate.
- 8. (Currently Amended) A plant protection formulation as claimed in at least one of claims 1 to 7claim 1, wherein the proportion of macromonomers B) in the polymers at least one polymer is 50.1 to 99.9 % by weight, preferably 70 to 95 % by weight, particularly preferably 80 to 94 % by weight.
- 9. (Currently Amended) A plant protection formulation as claimed in at least one of claims 1 to 7claim 1, wherein the proportion of macromonomers B) in the polymers at least one polymer is 0.1 to 50 % by weight, preferably 5 to 25 % by weight, particularly preferably 6 to 20 % by weight.

10. (Currently Amended) A plant protection formulation as claimed in at least one of claims 1 to 9claim 1, wherein the number-average molecular weight of the polymers at least one polymer is 1000 to 20 000 000 g/mol, preferably 20 000 to 5 000 000 g/mol, particularly preferably 50 000 to 1 500 000 g/mol.

- 11. (Currently Amended) A plant protection formulation as claimed in at least one of claims 1 to 10claim 1, wherein the polymers are at least one polymer is crosslinked.
- 12. (Currently Amended) A plant protection formulation as claimed in at least one of claims 1 to 11, claim 1, wherein the radical copolymerization being is a precipitation polymerization reaction, preferably in tert-butanol.
- 13. (Currently Amended) A <u>suspension concentrate comprising a plant protection</u> formulation as claimed in <u>at least one of claims 1 to 12, which is a suspension concentrate claim 1.</u>
- 14. (Currently Amended) A suspension concentrate as claimed in claim 13, wherein the water content, with reference to the of a ready-mix formulation, is 10 to 50 % by weight, preferably 10 to 45 % by weight, particularly preferably 25 to 45 % by weight.
- 15. (Currently Amended) A suspension concentrate as claimed in claim 13 and/or 14, wherein the proportion of the polymersat least one polymer, with reference to the in a ready-mix formulation, is 0.01 to 10 % by weight, preferably 0.01 to 5 % by weight.
- 16. (Currently Amended) A suspension concentrate as claimed in at least one of claims 1 to 15, which additionally comprises claim 1, further comprising at least one dispersant.

17. (Currently Amended) A suspension concentrate as claimed in claim 16, which comprises, as wherein the at least one dispersant, is selected from the group consisting of phosphoric acid esters and phosphoric acid ester salts of fatty alcohols and fatty alcohol alkoxylates, preferably poly(arylalkyl)phenol polyethylene glycol phosphoric acid esters and tristyryl polyglycol ether phosphates; methoxycarbonylcellulose; methylcellulose; starch; alginates; sulfonated naphthalene-formaldehyde condensates; lignosulfonates; polyvinylpyrrolidone and/orand polyvinyl alcohol.

- 18. (Currently Amended) A suspension concentrate as claimed in at least one of claims 13 to 17, which comprises claim 13, comprising, with reference to the in a ready-mix suspension concentrate, 0.5 to 10 % by weight, particularly preferably 0.5 to 5 % by weight, of dispersants of the at least one dispersant and 0.01 to 2.5 % by weight, preferably 0.025 to 1 % by weight, of polymers of the at least one polymer.
- 19. (Currently Amended) A suspension concentrate as claimed in at least one of claims 13 to 18, claim 13, further comprising at least one pesticide and wherein the proportion of pesticides, with reference to the the at least one pesticide, in a readymix suspension concentrate, is 10-90 % by weight, preferably 30 to 60 % by weight, particularly preferably 40 to 50 % by weight.
- 20. (Currently Amended) A plant protection formulation as claimed in at least one of claims 1 to 19, which comprises claim 1, further comprising at least one pesticide which is sparingly soluble in water.
- 21. (Currently Amended) A plant protection formulation as claimed in at least one of claims 1 to 20, which comprises claim 1, further comprising at least one pesticide which is sparingly soluble in water and at least one pesticide which is readily soluble in water.

- 22. (Currently Amended) A method for increasing the suspensibility of a plant protection formulation in the form of a suspension comprising the step of adding to the plant formulation at least one polymer Use of polymers which can be prepared by radical copolymerization of
- A) acrylamidopropylmethylenesulfonic acid (AMPS) and/or its salts;
- B) one or more macromonomers according to formula (1)

$$R^{1}-Y-(R^{2}-O)_{x}(R^{4}-O)_{z}-R^{3}$$
 (1)

in which wherein

R¹ is a vinyl, allyl, acryloyl, methacryloyl, senecioyl or crotonyl residue:

R² and R⁴ are, independently of one another, (C₂-C₄)-alkylene;

- x and z are, independently of one another, a whole number between 0 and 500, with x+z greater than or equal to 1;
- Y is O, S, PH or NH, preferably O; and R³ is hydrogen or a saturated or unsaturated, linear or branched, aliphatic, cycloaliphatic or aromatic (C₁-C₁₀₀)- hydrocarbon residue, preferably (C₄-C₃₀)- hydrocarbon residue, and
- C) optionally one or more other at least mono- or polyolefinically unsaturated oxygen-, nitrogen-, sulfur-, phosphorus-, chlorine- and/or fluorine-comprising containing comonomers,

for increasing the suspensibility of plant protection formulations present in the form of suspensions.

23. (Currently Amended) The <u>use-method</u> as claimed in claim 22, wherein the plant protection <u>formulations are formulation is a</u> suspension <u>concentrates</u>concentrate.

- 24. (New) A plant protection formulation as claimed in claim 1, wherein Y is oxygen.
- 25. (New) A plant protection formulation as claimed in claim 1, wherein R^3 is a (C_1-C_{30}) -hydrocarbon residue.
- 26. (New) A plant protection formulation as claimed in claim 3, wherein R^3 is a $(C_{10}-C_{22})$ -alkyl or -alkenyl residue.
- 27. (New) A plant protection formulation as claimed in claim 3, wherein R³ is a sec-butyl- or n-butylphenyl residue.
- 28. (New) A plant protection formulation as claimed in claim 3, wherein R³ is a tris(sec-butyl)phenyl residue or tris(n-butyl)phenyl residue.
- 29. (New) A plant protection formulation as claimed in claim 3, wherein R³ is a tristyrylphenyl residue.
- 30. (New) A plant protection formulation as claimed in claim 5, wherein the comonomer A) is the ammonium salt of acrylamidopropylmethylenesulfonic acid.
- 31. (New) A plant protection formulation as claimed in claim 5, wherein the one or more macromonomers B) is an ester formed from methacrylic acid.
- 32. (New) A plant protection formulation as claimed in claim 5, wherein x is between 5 and 30.
- 33. (New) A plant protection formulation as claimed in claim 7, wherein the comonomer A) is the ammonium salt of acrylamidopropylmethylenesulfonic acid.

- 34. (New) A plant protection formulation as claimed in claim 7, wherein the one or more macromonomers is an ester formed from methacrylic acid.
- 35. (New) A plant protection formulation as claimed in claim 7, wherein x is between 5 and 30.
- 36. (New) A plant protection formulation as claimed in claim 7, wherein R³ is a tris(sec-butyl)phenyl residue or tris(n-butyl)phenyl residue.
- 37. (New) A plant protection formulation as claimed in claim 7, wherein R³ is a 2,4,6-tris(sec-butyl)phenyl residue.
- 38. (New) A plant protection formulation as claimed in claim 7, wherein R³ is a 2,4,6-tris(1-phenylethyl)phenyl residue.
- 39. (New) A plant protection formulation as claimed in claim 1, wherein the proportion of macromonomers B) in the at least one polymer is 70 to 95% by weight.
- 40. (New) A plant protection formulation as claimed in claim 1, wherein the proportion of macromonomers B) in the at least one polymer is 80 to 94% by weight.
- 41. (New) A plant protection formulation as claimed claim 1, wherein the proportion of macromonomers B) in the at least one polymer is 5 to 25%.
- 42. (New) A plant protection formulation as claimed claim 1, wherein the proportion of macromonomers B) in the at least one polymer is 6 to 20%.
- 43. (New) A plant protection formulation as claimed in claim 1, wherein the number-average molecular weight of the at least one polymer is 20 000 to 5 000 000 g/mol.

44. (New) A plant protection formulation as claimed in claim 1, wherein the number-average molecular weight of the at least one polymer is 50 000 to 1 500 000 g/mol.

- 45. (New) A plant protection formulation as claimed in claim 12, wherein the precipitation polymerization reaction occurs in tert-butanol.
- 46. (New) A suspension concentrate as claimed in claim 13, wherein the water content, of a ready-mix formulation, is 10 to 45% by weight.
- 47. (New) A suspension concentrate as claimed in claim 13, wherein the water content, of a ready-mix formulation, is 25 to 45% by weight.
- 48. (New) A suspension concentrate as claimed in claim 13, wherein the proportion of the at least one polymer, in a ready-mix formulation, is 0.01 to 5% by weight.
- 49. (New) A suspension concentrate as claimed in claim 16, wherein the at least one dispersant is a poly(arylalkyl)phenol polyethylene glycol phosphoric acid ester or a tristyryl polyglycol ether phosphate.
- 50. (New) A suspension concentrate as claimed in claim 13, comprising, in a ready mix suspension concentrate, 0.5 to 5% by weight of the at least one dispersant and 0.025 to 1% by weight of the at least one polymer.
- 51. (New) A suspension concentrate as claimed in claim 13, further comprising at least one pesticide and wherein the proportion of the at least one pesticide, in a ready-mix suspension concentrate, is 30 to 60% by weight.

- 52. (New) A suspension concentrate as claimed in claim 13, further comprising at least one pesticide and wherein the proportion of the at least one pesticide, in a ready-mix suspension concentrate, is 40 to 50% by weight.
- 53. (New) The method as claimed in claim 22, wherein Y is oxygen.
- 54. (New) The method as claimed in claim 22, wherein R^3 is a (C_1-C_{30}) -hydrocarbon residue.